

We claim:

16. An improved computer jukebox for playing songs selected by users of the computer jukebox from a library of songs that have been digitally compressed and stored in the computer jukebox, where the library of songs stored in the computer jukebox is capable of being updated upon the receipt of compressed digital song data, which represents at least one song, and upon the receipt of song identity data, which represents the identity of each such song, the computer jukebox comprising:

a communication interface for receiving the compressed digital song data and the song identity data;

a data storage unit for storing the received compressed digital song data and the received song identity data for each of the songs stored;

a display for showing, to prospective user of the computer jukebox, information identifying the songs for which digital song data is stored in the data storage unit and that is based on song identity data;

selection keys responsive to a selection of a song to be played on the computer jukebox from the song identity information displayed on the display, the selection keys including a signal output representing activation of the selection keys;

at least one audio speaker;

a processor connected to a memory, the memory including a decompression algorithm for decompressing compressed digital song data;

a digital to analog converter coupled between the processor and the audio speaker to convert digital song data to an analog signal coupled to the speaker; and

wherein the memory further includes instructions for:

causing the processor, in response to the signal output, to access and process compressed digital song data retrieved from the data storage unit so that the accessed compressed digital song data corresponds to the song selected by the selection keys;

causing the processor to decompress the accessed compressed digital song data and send the decompressed digital song data to the digital to analog converter so that the song selected is played on the computer jukebox as a result of the corresponding stored compressed song digital data being decompressed and converted by the processor and the digital to analog converter; and

causing the processor to respond to compressed digital song data and to song identity data, which may be received by the communication interface of the computer jukebox, to control the storage of the received compressed digital song data and the received song identity data in the data

storage unit to create an updated library of songs stored in the computer jukebox.

17. The computer jukebox of claim 16, wherein the memory further comprises instructions causing the processor to respond to control the information shown on the display to include the updated library of songs, instructions causing the processor to store song usage data generated upon the playing of a song, and wherein the communications interface includes a transmitter for transmitting song the song usage data under the control of the processor.

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18. The computer jukebox of claim 16, wherein the data storage unit stores compressed pictorial graphics, received by the communication interface, and associated with the compressed digital song data.

19. The computer jukebox of claim 18, wherein the compressed pictorial graphics represent song associated pictorial graphics; and wherein the memory further comprises instructions causing the processor, when no song is playing on the computer jukebox, to generate a user attract mode wherein song associated graphic images are shown on the display.

20. The computer jukebox of claim 16, wherein the communication interface is selected from the group consisting essentially of: modems, radio frequency transmitters and receivers, and direct communication interface ports, and wherein the data storage unit stores compressed song identity data as received by the communication interface.

21. The computer jukebox of claim 16, wherein the display is at least 14 inches in diagonal measure.

22. An improved computer jukebox network comprising: a plurality of computer jukeboxes where each computer jukebox is capable of playing songs selected by users of the computer jukebox from a library of songs that have been digitally compressed and stored in the computer jukebox and where the library of songs is capable of being updated upon the receipt of compressed digital song data, which represents at least one song, and upon the receipt of song identity data which represents the identity of each such song; and a management station for updating the library of songs in each of the plurality of computer jukeboxes;
with each computer jukebox comprising:

a communication interface for receiving the compressed digital song data and the song identity data;

a data storage unit for storing the received compressed digital song data and the received song identity data for each of the songs stored;

a display for showing, to prospective user of the computer jukebox, information based on song identity data for identifying the songs for which digital song data is stored in the data storage unit;

selection keys responsive to a selection of a song to be played on the computer jukebox from the song identity information displayed on the display, the selection keys including a signal output representing activation of the selection keys;

at least one audio speaker;

a processor connected to a memory, the memory including a decompression algorithm for decompressing compressed digital song data;

a digital to analog converter coupled between the processor and the audio speaker to convert digital song data to an analog signal coupled to the speaker; and

wherein the memory further includes instructions for:

causing the processor, in response to the signal output, to access and process compressed digital song data retrieved from the data storage unit so that the accessed compressed digital song data corresponds to the song selected by the selection keys;

causing the processor to decompress the accessed compressed digital song data and send the decompressed digital song data to the digital to analog converter so that the song selected is played on the computer jukebox as a result of the corresponding stored compressed digital song data being decompressed and converted by the processor and the digital to analog converter; and

causing the processor to respond to compressed digital song data and to song identity data, which may be received by the communication interface of the computer jukebox, to control the storage of the received compressed digital song data and the received song identity data in the data storage unit to create an updated library of songs stored in the computer jukebox; and

wherein the management station comprises:

a communication interface including a receiver and a transmitter; and
a management station processor connected to a management station memory, the management station memory including instructions for:

causing the management station processor to store digital song data, representing a set of songs, and song identity data, representing the identity of each song in the set of songs in a management station data storage unit;

causing the management station processor to compress digital song data stored in the management station data storage unit;

causing the management station processor to compress and transmit a subset of the digital song data and transmit corresponding song identity data to at least one selected computer jukebox to update the library of songs in the computer jukebox.

23. The jukebox network of claim 22 wherein the management station is remote from the computer jukeboxes; and wherein the communication interface of each computer jukebox is a bi-directional communication interface.

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24. The jukebox network of claim 22 wherein the management station is portable; and wherein the communications interface of the management station and at least one computer jukebox is a direct communication link interface.

25. The jukebox network of claim 22, wherein the memory in each computer jukebox further comprises instructions causing the processor to respond to control the information shown on the display to include the updated library of songs.

Atty. Docket No. 10527US08

26. The jukebox network of claim 22, wherein the memory in each computer jukebox further comprises instructions causing the processor to store song usage data generated upon the playing of a song, and wherein the communications interface includes a transmitter for transmitting song the song usage data under the control of the processor.

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